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# FIGURE 1

```
1  ATGTCAGTGGGAGCCATGAAGAAGGAGTGGGAGGGCAGTTGGGCTTGAGGGCGGCAGC    60
61  GGCTGCCAGGCTACGAGGAAGACCCCTTCCCGACTGCGGGGCTTGCGCTCCGGGACAA    120
121  GGTGGCAGGCGCTGGAGGCTGCCGAGCCTGCGTGGTGGAGGGAGCTCAGCTCGGTTG    180
181  TGGGAGCAGGCGACCGGCACTGGCTGGATGGACCTGGAAGCCTCGCTGCTGCCCACTGGT    240
241  CCCAATGCCAGCAACACCTCTGATGGCCCCGATAACCTCACTTCAGCAGGATCACCTCCT    300
301  CGCACGGGAGCATCTCCTACATCAACATCATGCTTCGGGTTCGGCACCATCTGC    360
361  CTCCTGGGCATCATCGGGAACCTCCACGGTCATCTTCGCGGTTCGTGAAGAAGTCCAAGCTG    420
421  CACTGGTGCAACAACGTCCCCGACATCTTCATCATCAACCTCTCGGTAGTAGATCTCCTC    480
481  TTTCTCCTGGGCATGCCCTTTCATGATCCACCAGCTCATGGGCAATGGGGTGTGGCACTTT    540
541  GGGGAGACCATGTGCACCCCTCATCACGGCCATGGATGCCAATAGTCAGTTCACCCAGCAC    600
601  TACATCCTGACCGCCATGGCCCATTGACCGCTACCTGGCCACTGTCCACCCCATCTCTTCC    660
661  ACGAAGTTCCGGGAAGCCCTCTGTGGCCACCCCTGGTGATCTGCCCTCCTGTGGGCCCTCTCC    720
721  TTCATCAGCATCACCCCTGTGTGGCTGTATGCCAGACTCATCCCCCTTCCCAGGAGGTGCA    780
781  GTGGGCTCGGGCATACGCCCTGCCCAACCCAGACACTGACCTCTACTGTTCAACCCTGTAC    840
841  CAGTTTTCCTGGCCCTTTGCCCTGCCCTTTTGTGGTCATCACAGCCGCATACGTGAGGATC    900
901  CTGCAGCGCATGACGTCCCTCAGTGGCCCCCGCCCTCCAGCGCAGCATCCGGCTGCGGGACA    960
961  AAGAGGTGACCCCGCACAGCCATCGCCCATCTGTCTGGTCTTCTTTGTGTGCTGGGCACCC    1020
1021  TACTATGTGCTACAGCTGACCCCAAGTTGTCCATCAGCCGCCCGCCAGCCCTCACCTTTGTCTAC    1080
1081  TTATACAAATGGGGCCATCAGCTTGGGCTATGCCAACAGCTGCCCTCAACCCCTTTGTGTAC    1140
1141  ATCGTGCTCTGTGAGACGTTCCGGCAACAGCTTGGTCTGTGCGTGAAGCCTGCAGCCCCAG    1200
1201  GGCAGCTTCGGCTGTTCAGCAACGCTCAGACGGCTGACGAGGAGGACAGAAAGCAAA    1260
1261  GGCACCTGA
```

# FIGURE 2

[illegible]

**FIGURE 3** **3/15**

1	M S V G A M K K G V G R A V G L G G G S	20
21	G C Q A T E E D P L P D C G A C A P G Q	40
41	G G R R W R L P Q P A W V E G S S A R L	60
61	W E Q A T G T G W M D L E A S L L P T G	80
81	P N A S N T S D G P D N L T S A G S P P	100
101	R T G S I S Y I N <u>I I M P S V E G T I C</u>	120
121	<u>L L G I I G N S T V I F A V V K K S K L</u>	140
141	H W C N N V P D <u>I F I I N L S V V D L L</u>	160
161	<u>F L L G M P F M I H Q L M G N G V W H F</u>	180
181	G E T M C T L I T A M D <u>A N S O F T S T</u>	200
201	<u>Y I L T A M A I D R Y L A T V H P I S S</u>	220
221	T K F R K P S <u>V A T L V I C L L W A L S</u>	240
241	<u>F I S I T P V W L Y A R L I P F P G G A</u>	260
261	<u>V G C G I R L P N P D T D L Y W F T L Y</u>	280
281	<u>O F F L A F A L P F V V I T A A Y V R I</u>	300
301	L Q R M T S S V A P A S Q R S I R L R T	320
321	K R <u>V T R T A I A I C L V F F V C W A P</u>	340
341	<u>Y Y V L O L T O L S I S R P T L T F V Y</u>	360
361	<u>L Y N A A I S L G Y A N S C L N P F V Y</u>	380
381	<u>I V L C E T F R K R L V L S V K P A A Q</u>	400
401	G Q L R A V S N A Q T A D E E R T E S K	420
421	G T	422

# FIGURE 4

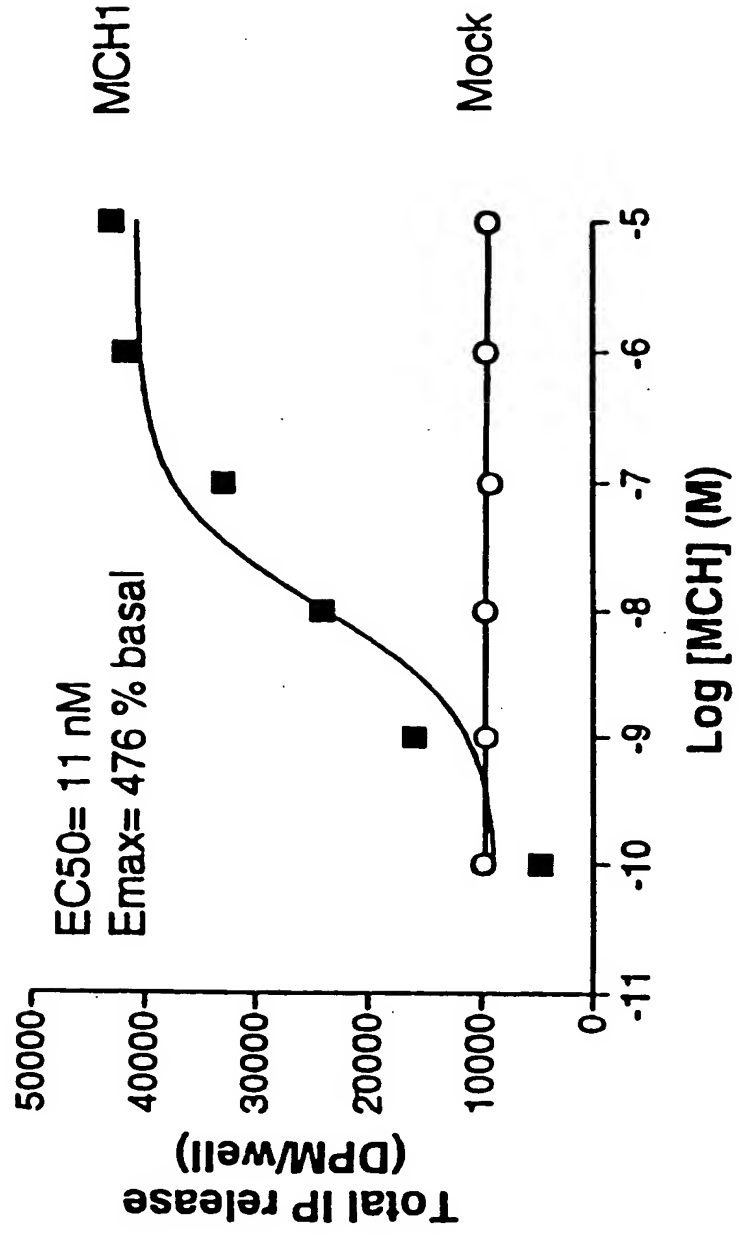
1 GCAGGGACCTGCACCGGCTGCATGGATCTGCAAAACCTCGTTGCTGTCCACTGGCCCCAA 60  
 61 TGCCAGCAACATCTCCGATGGCCAGGATAATCTCACATTGCCGGGTACCTCCTCGCAC 120  
 121 AGGGAGTGCTCCTACATCAACATCAATTATGCCCTTCCGTGTTGGTACCATCTGTCTCCT 180  
 181 GGGCATCGTGGGAAACTCCACGGTCACTTTTGCTGTGGTGAAGAAGTCCAAGCTACACTG 240  
 241 GTGCAGCAACGTCCCCGACATCTTCATCATCAACCTCTCTGTGTGGATCTGCTCTTCCT 300  
 301 GCTGGGCATGCCCTTTTCATGATCCACAGCTCATGGGAAACGGCGTCTGGCAGCTTGGGGA 360  
 361 AACCATGTGCACCCCTCATCACAGCCATGGACGCCAACAGTCAGTTCAC TAGCACCTACAT 420  
 421 CCTGACTGCCCATGACCATTGACCGCTACTTGGCCACCGTCCACCCCATCTCCTCCACCAA 480  
 481 GTTCCGGAGCCCTCCATGGCCACCCCTGGTGATCTGCCCTCCTGTGGCGCTCTCCTTCAT 540  
 541 CAGTATCACCCCTGTGTGGCTCTACGCCAGGCTCATTCCTTCCAGGGGTGCTGTGGG 600  
 601 CTGTGGCATCCGCCCTGCCAAACCCGGACACTGACCTCTACTGGTTCACCTGTACCAGTT 660  
 661 TTTCTCTGGCCTTTGCCCTTCCGTTTGTGGTCATTACCGCCGCATACGTGAAAATACTACA 720  
 721 GCGCATGACGCTTTCGGTGGCCCCAGCCTCCCAACGCAGCATCCGGCTTCGGACAAAAGAG 780  
 781 GGTGACCCGCACGGCCATTGCCATCTGTCTGGTCTTCTTGTGTGCTGGGCACCCCTACTA 840  
 841 TGTGCTGCAGCTGACCCAGCTGTCCATCAGCCGCCCGACCCCTCACGTTTGTCTACTTGTA 900  
 901 CAACGGGCCATCAGCTTGGGCTATGCTAACAGCTGCCCTGAACCCCTTTGTGTACATAGT 960  
 961 GCTCTGTGAGACCTTTCGAAAACGCTTGGTGTGTGTCAGTGAAGCCTGCAGCCCCAGGGGCA 1020  
 1021 GCTCCGCACGGTCAGCAACGCTCAGACAGCTGATGAGGAGAGGACAGAAAGCAAAGGCAC 1080  
 1081 CTGACAATTCCCCAGTCGCCCTCCAAGTCAGGCCACCCCATCAAAACCGTGGGGAGAGATAC 1140  
 1141 TGAGATTAAACCCAAAGGCTACCTGGGAGAATGCAGAGGCTGGAGGCTGGGGGCTTGTAG 1200  
 1201 CAACCACATTCCAC 1214

# FIGURE 5

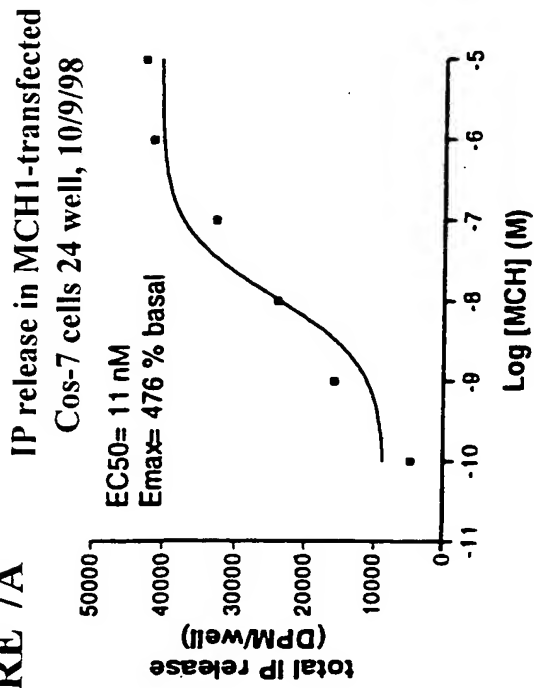
[illegible]

# FIGURE 6

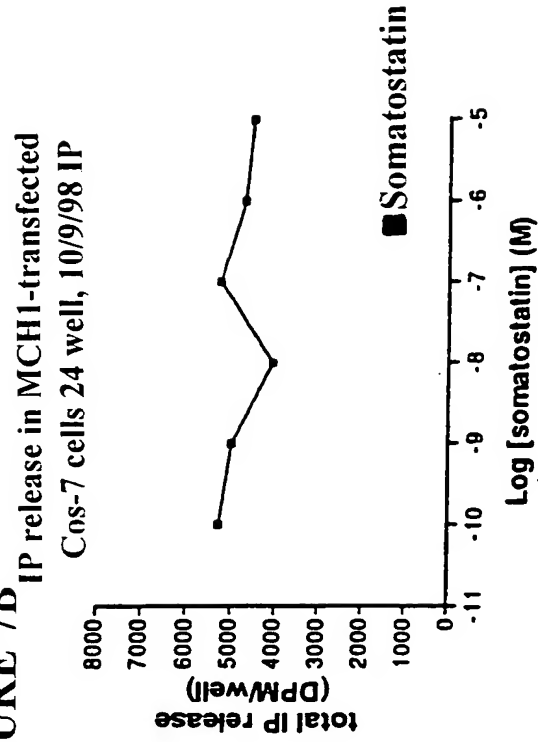
IP release in MCH1- and  
mock-transfected Cos-7 cells



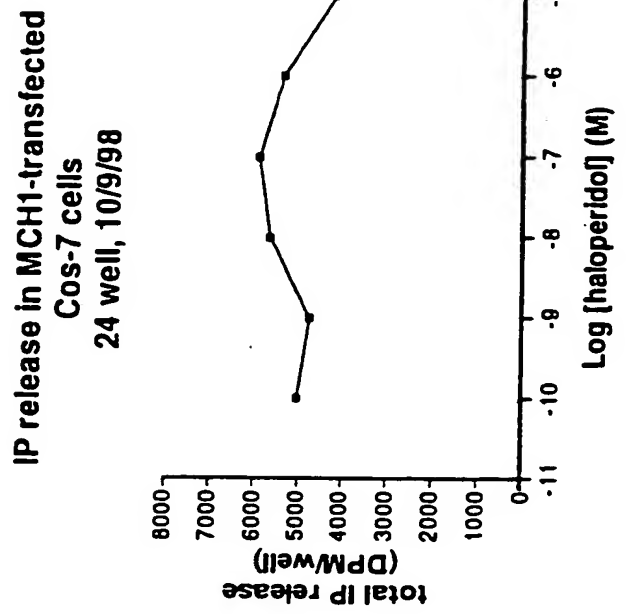
**FIGURE 7A**



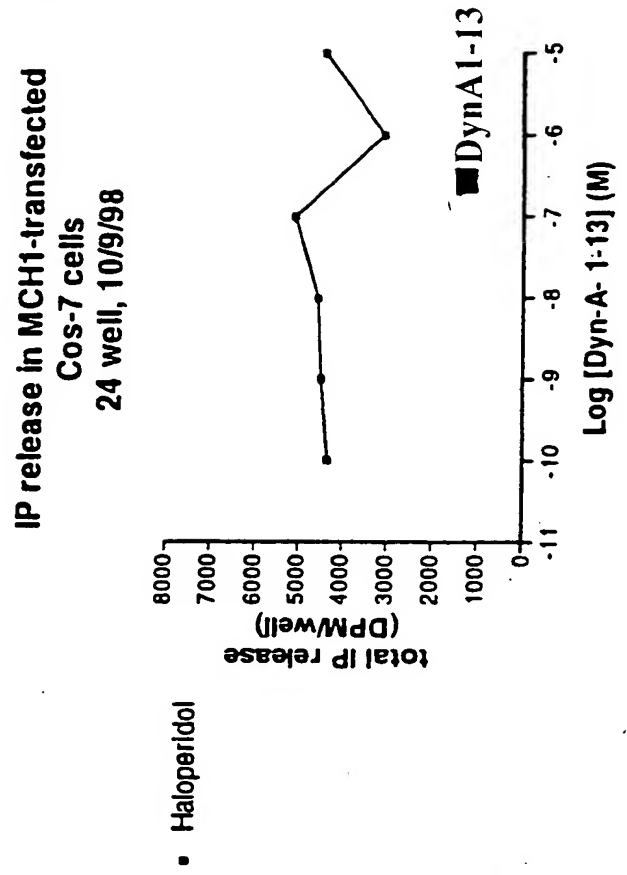
**FIGURE 7B**



**FIGURE 7C**



**FIGURE 7D**





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FIGURE 8A

Microphysiometer Response  
CHO cells

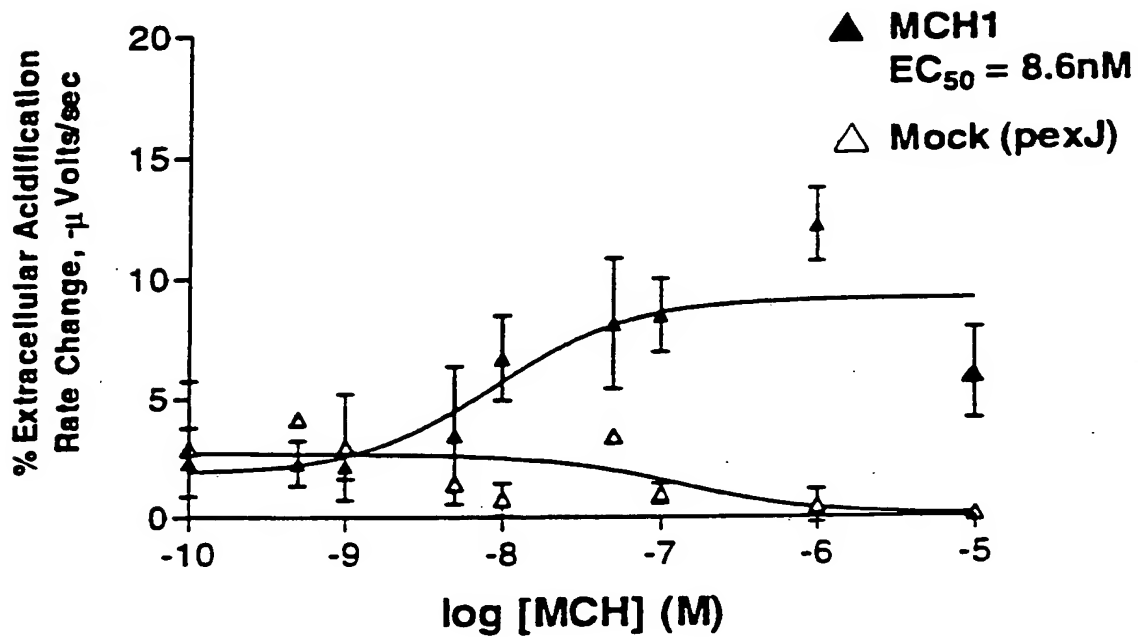
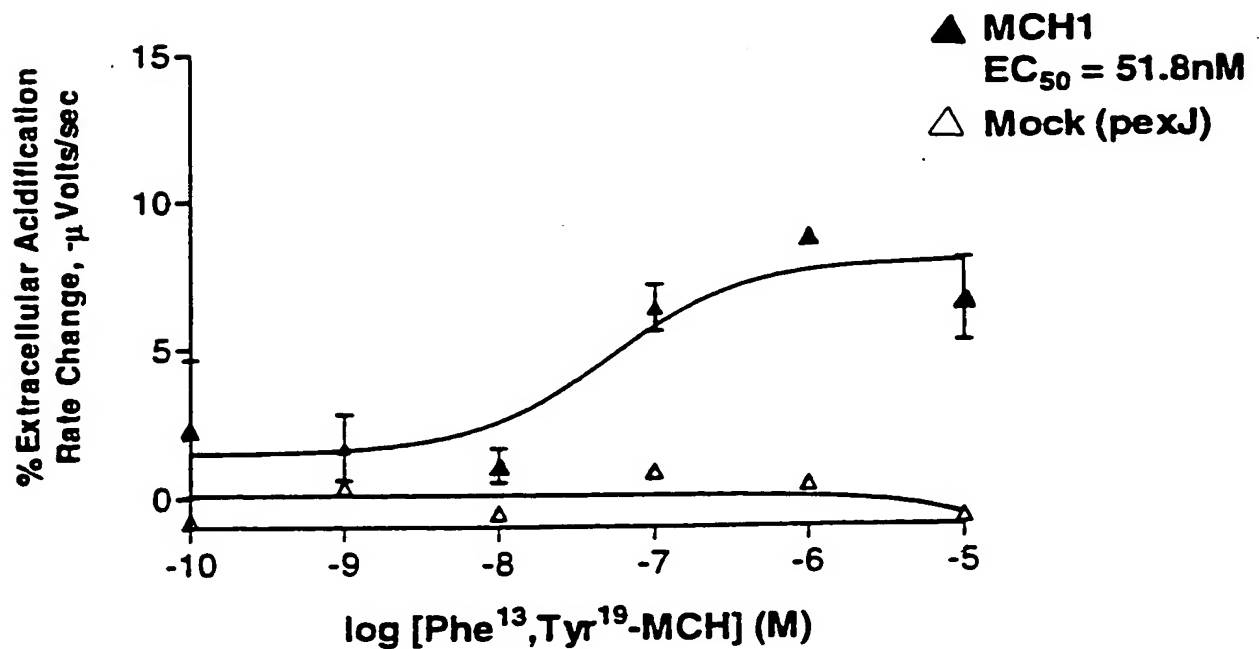


FIGURE 8B

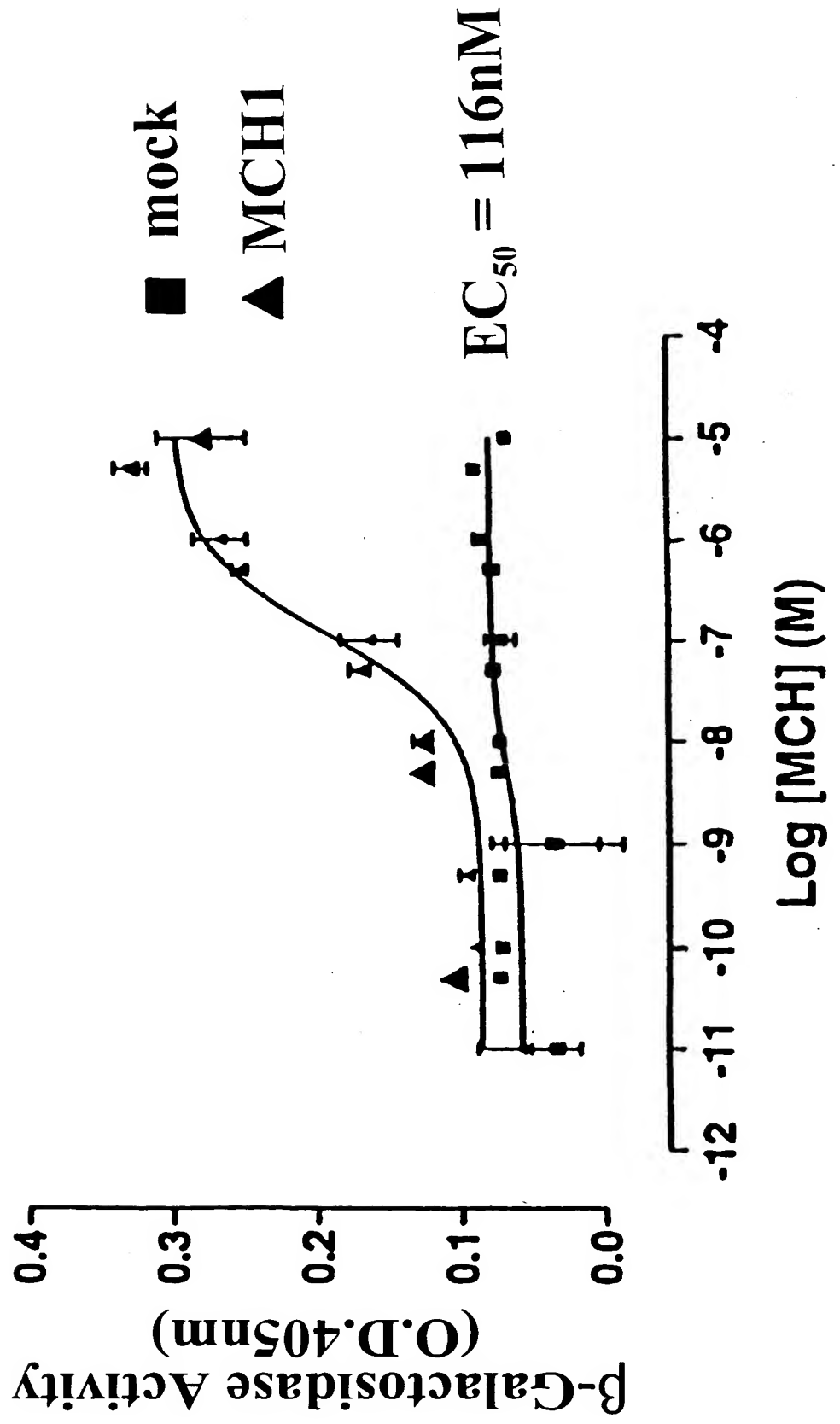
Microphysiometer Response  
CHO cells



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**FIGURE 9**

**Agonist-Mediated c-fos- $\beta$ -gal  
Activity in Cos-7 Cells**



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FIGURE 10A

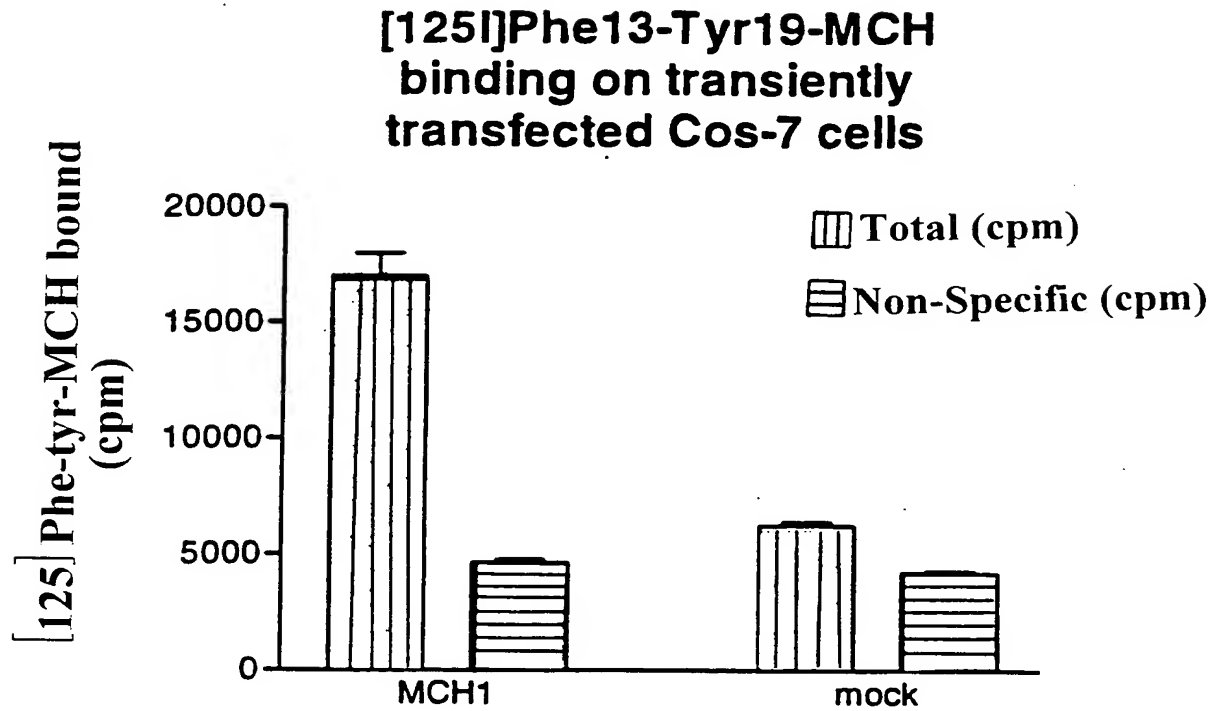
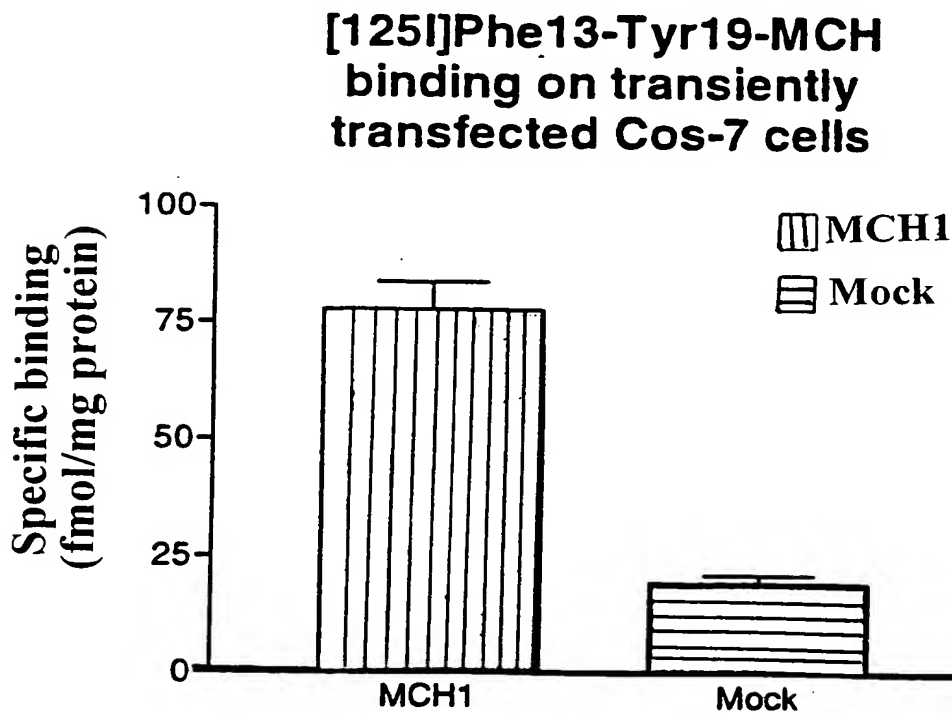
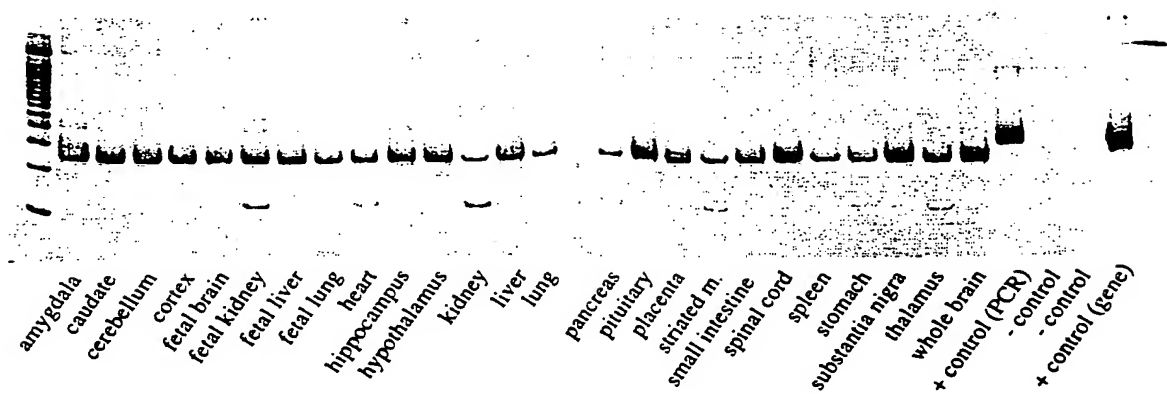


FIGURE 10B



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## FIGURE 11



# FIGURE 12

				1					40
TL231	MSVGAMKKGV	GRAVGLGGGS	GCQATEEDPL	PDCGACAPGQ					
R106	MSVGAMKKGV	GRAVGLGGGS	GCQATEEDPL	PDCGACAPGQ					
R114	MSVGAaKKGV	GRAVGLGGGS	GCQATEEDPL	PDCGACAPGQ					
BO120	~~~~~	~~~~~	~~~~~	~~~~~					

				41					80
TL231	GRRRWRLPQP	AWVEGSSARL	WEQATGTGWM	DLEASLLPTG					
R106	GRRRWRLPQP	AWVEGSSARL	WEQATGTGwa	DLEASLLPTG					
R114	GRRRWRLPQP	AWVEGSSARL	WEQATGTGwa	DLEASLLPTG					
BO120	~~~~~	~~~~~	~~~~~M	DLEASLLPTG					

				81				100
TL231	PNASNTSDGP	DNLTSAGSPP...						
R106	PNASNTSDGP	DNLTSAGSPP...						
R114	PNASNTSDGP	DNLTSAGSPP...						
BO120	PNASNTSDGP	DNLTSAGSPP...						

# FIGURE 13

[illegible]

## FIGURE 14

[illegible]

# FIGURE 15

1	M	D	L	E	A	S	L	L	P	T	G	P	N	A	S	N	T	S	D	G
21	P	D	N	L	T	S	A	G	S	P	P	R	T	G	S	I	S	Y	I	N
41	I	I	M	P	S	V	F	G	T	I	C	L	H	G	I	I	G	N	S	
61	V	I	F	A	V	V	K	K	S	K	L	L	W	C	N	N	V	P	D	
81	F	I	I	N	L	S	V	V	D	L	L	F	L	L	G	M	P	F		
101	H	Q	L	M	G	N	G	V	W	H	F	G	E	T	M	C	T	L		
121	A	M	D	A	N	S	Q	F	T	S	T	Y	I	L	T	A	M	A		
141	R	Y	L	A	T	V	H	P	I	S	S	T	K	F	R	K	P	S		
161	T	L	V	I	C	L	L	W	A	L	S	F	I	S	I	T	P	V		
181	Y	A	R	L	I	P	F	P	G	A	V	G	C	G	I	R	L	P		
201	P	D	T	L	Y	A	Y	F	T	L	Y	Q	F	F	L	A	F	L		
221	F	V	V	I	T	A	Y	R	V	R	I	K	R	V	T	R	T	A		
241	P	A	S	Q	R	S	I	R	L	R	A	P	Y	V	L	Q	L	T		
261	I	C	L	V	F	F	V	C	W	A	P	Y	Y	N	A	A	I	S		
281	S	I	S	R	P	T	L	T	F	V	Y	L	Y	V	L	C	E	T		
301	Y	A	N	S	C	L	N	P	F	V	Y	I	V	L	R	A	V	S		
321	R	L	V	L	S	V	K	P	A	Q	G	Q	L	R	A	N	A			
341	Q	T	A	D	E	E	R	T	E	S	K	G	T							